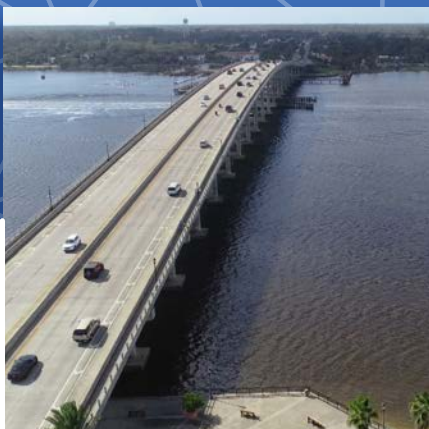
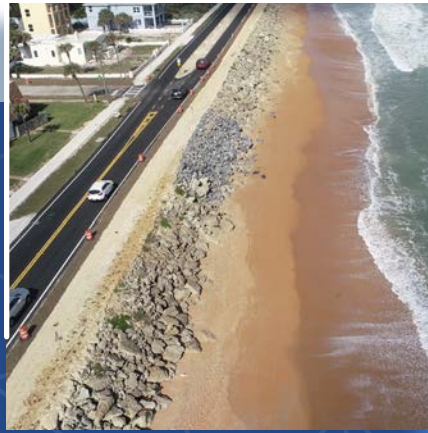


CONNECT2045

YOUR COMMUNITY
TRANSPORTATION PLAN



ACKNOWLEDGMENTS

This report was financed, in part, by the U.S. Department of Transportation and the Florida Department of Transportation (FDOT).

Special recognition and appreciation is extended to the following members of the River to Sea TPO 2045 LRTP Subcommittee. These individuals spent many hours directing and overseeing the work required to complete this effort.

2045 Long Range Transportation Plan (LRTP) Subcommittee Members

Member	Committee	Representing
Gayle Belin	BPAC	Ormond Beach
Chris Daun	BPAC	Volusia County - District 2
Bob Storke	BPAC	Orange City
Nic Mostert	BPAC	New Smyrna Beach
Marcia Stevens-Foltz	CAC	Flagler County
Bobby Ball	CAC	Port Orange
Dave Castagnacci	CAC	Volusia County - Chair
Jose Papa	TCC	Palm Coast
Andrew Holmes	TCC	Daytona Beach
Becky Mendez	TCC	Orange City
Amye King	TCC	New Smyrna Beach
Jon Cheney/Melissa Winsett (alt)	TCC	Volusia County
Judy Craig	TDLCB	Disabled Citizens

BPAC – Bicycle/Pedestrian Advisory Committee

CAC – Citizen's Advisory Committee

TCC – Technical Coordinating Committee

TDLCB – Transit Disadvantaged Local Coordinating Board

River to Sea TPO Board members upon adoption of Connect 2045:

Commissioner Jason McGuirk, Chairperson, New Smyrna Beach
Council Member Billie Wheeler, 1st Vice Chairperson, Volusia County, District 2
Council Member Barbara Girtman, 2nd Vice Chairperson, Volusia County District 1
Commissioner Jeffrey Schuitema*, Beverly Beach
Vice Mayor John Rogers*, Bunnell
Commissioner Robert Gilliland, Daytona Beach
Vice Mayor Richard Bryan*, Daytona Beach Shores
Mayor Karen Chasez, DeBary
Commissioner Chris Cloudman, DeLand
Vice Mayor Victor Ramos, Deltona
Councilwoman Christine Power, Edgewater
Commissioner Rick Belhumeur*, Flagler Beach
Commissioner Joe Mullins, Flagler County
Commissioner Roy Johnson, Holly Hill
Commissioner Vernon Burton*, Lake Helen
Commissioner Bill Lindlau**, Oak Hill
Council Member Jeff Allebach, Orange City
Commissioner Dwight Selby, Ormond Beach
Council Member Bob Cuff, Palm Coast
Mayor Samuel Bennett, Pierson
Council Member Joe Perrone*, Ponce Inlet
Council Member Scott Stiltner, Port Orange
Councilman Ralph Schoenherr, South Daytona
Council Chair Ed Kelley, Volusia County
Council Member Deb Denys, Volusia County, District 3
Council Vice Chair Fred Lowry, Volusia County, District 5
Carl Persis (non-voting), Volusia County School Board
Andy Dance (non-voting), Flagler County School Board
Paul Eik (non-voting), BPAC Chairperson
Nora Jane Gillespie (non-voting), CAC Chairperson
Becky Mendez (non-voting), TCC Chairperson
Anna Taylor (non-voting advisor), FDOT District 5

** Non-voting member in the Small City Alliance*

*** Voting member for the Small City Alliance*

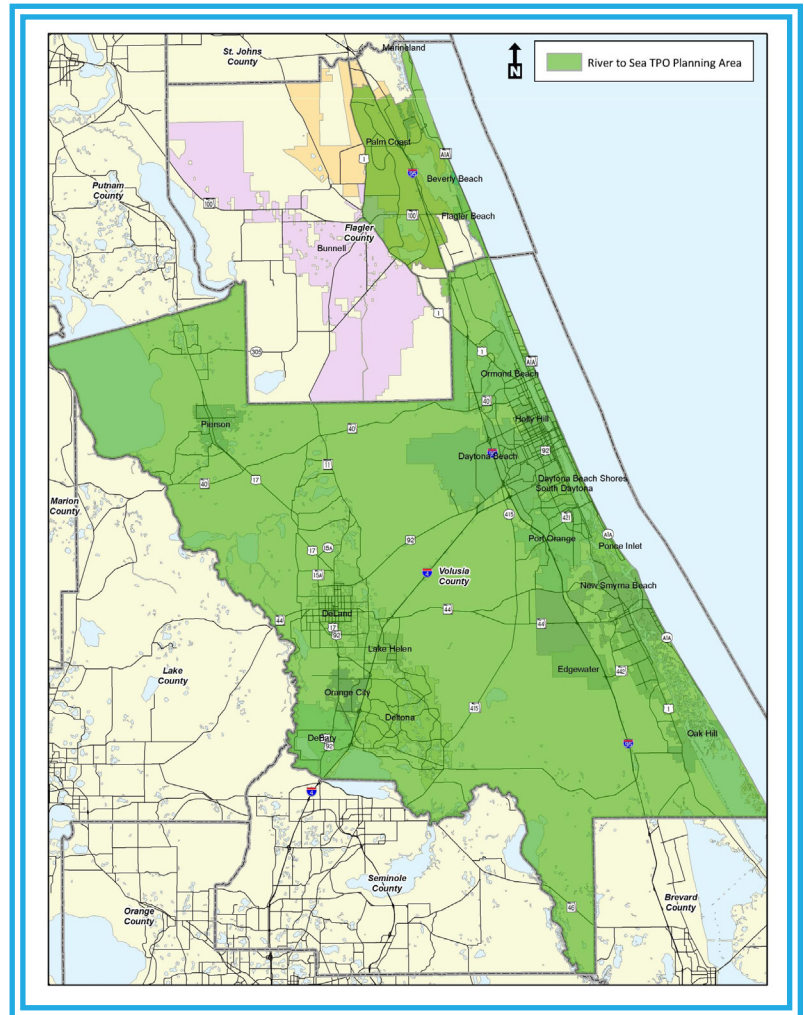
THE TPO AND PLANNING AREA

The River to Sea Transportation Planning Organization (TPO) is a federally authorized agency responsible for planning and programming federal and state transportation funds for the TPO Metropolitan Planning Area. This area includes Volusia County and portions of Flagler County inclusive of Flagler Beach, Beverly Beach, and portions of Palm Coast and Bunnell.

The TPO's Board consists of elected officials representing member local governments. These individuals work together to improve the safety and efficiency of the transportation system in the planning area. The TPO serves as the primary forum within which member local governments and citizens voice concerns, identify priorities, and plan for transportation improvements for all modes of transportation – roadway, public transit, and bicycle and pedestrian facilities. Seaports and airports are also considered in the TPO activities, and detailed planning for these modes is typically handled by their respective authorities.

The planning area's transportation network has a wide-reaching impact as it is home to many important corridors and facilities including the crossroads of I-95 and I-4, the northern terminus of SunRail, county transit systems, Daytona Beach International Airport, designated scenic byways, and the convergence of two regional trail systems, the Coast to Coast Trail and River to Sea Loop Trail. The area is growing rapidly and experiencing significant new planned development. Owing to the area's status as a leading tourism destination, long range planning must not only consider a burgeoning resident population, but consistently growing visitation as well.

We know the next 25 years will bring very real challenges for our communities, including an aging population, increasing concerns over urban sprawl, rapidly changing transportation technologies and a significantly less predictable energy, environmental and economic picture. By developing a long-range transportation plan, the River to Sea TPO and its members strive to identify the unmet needs in our area and work together to develop a strategic approach to planning for the future.



PURPOSE OF THE LRTP

Connect 2045 is the new long-range transportation plan developed to guide the transportation future of the River to Sea TPO area. The plan takes a look 25 years into the future to identify strategies that will address the transportation needs of the River to Sea TPO Metropolitan Planning Area (MPA). This MPA encompasses all of Volusia County and the urbanized portions of Flagler County inclusive of the cities of Flagler Beach, Beverly Beach, and portions of Palm Coast and Bunnell. To be effective, a long-range plan must provide a balanced approach to transportation by offering a variety of choices that address the diverse needs of our local communities.

More specifically, the Connect 2045 plan identifies the transportation projects needed and the anticipated federal and state funds that will support their development. Federal law requires the LRTP to be “cost-feasible” meaning that the estimated cost of the plan must fit within the federal, state, and local budget of the funding forecasted. Because revenues are not keeping pace with estimated needs, some projects will remain unfunded during this period of time. The River to Sea TPO recognizes that this activity is much more than a federal mandate but rather an opportunity to develop a coordinated, long range approach for planning an effective transportation system. Development of the LRTP began in the spring of 2019 and the plan was adopted in September 2020.



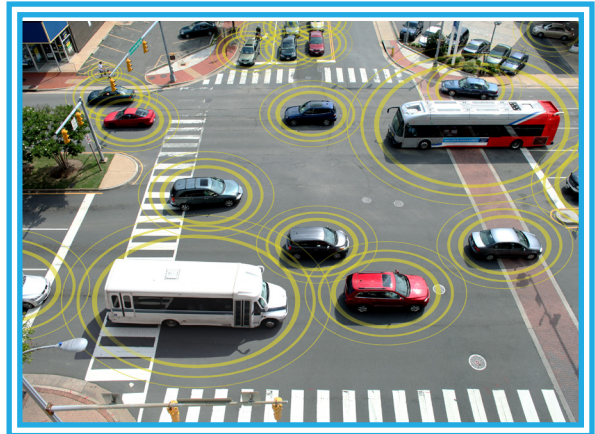
KEY THEMES

While a broad range of factors and trends influenced the development of Connect 2045, three important themes were a focus of the planning process: Technology, Resiliency, and Funding Choices.

Technology

Technology is transforming our transportation systems in new ways and the pace of change is accelerating.

- Technology can improve safety, enhance connections between transportation modes, and provide real-time transportation information to make trips more reliable
- Automated, connected, electric, and shared vehicles are also a growing consideration as we plan for transportation in the years ahead



Resiliency

Resiliency reflects our ability to mitigate, prepare for, respond to, and recover rapidly after disruptive events such as flooding, hurricane impacts, wildfires, or major traffic incidents.

- It is important for our transportation system to be resilient to maximize its reliability to move people and goods



Funding Choices

Funding Choices must consider forecasted revenue, anticipated population growth, and projected changes in travel demand.

- Transportation projects can be funded by federal, state, and local sources
- Per-gallon fuel sales taxes are a major source of revenue to fund transportation
- Florida's state highway fuel sales tax is indexed to adjust with inflation while the federal highway fuel sales tax has not changed since 1993
- Vehicle fuel efficiency continues to improve and electric vehicle sales are growing, both of which reduce the number of gallons consumed

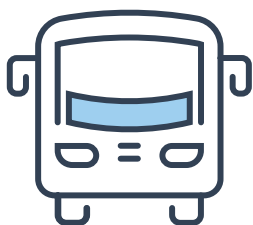


All three of these themes were the focus of scenarios that evaluated the possible implications of alternative futures.

CONNECT 2045 GOALS AND OBJECTIVES

Projects selected for inclusion in the 2045 LRTP are intended to reflect the Vision and Goals of the planning area and its member governments. Goals and objectives that reflect these visions were developed early in the planning process and work together to ensure that the transportation system is sustainable over time.

These goals and objectives are consistent with the guidance and requirements of the Fixing America's Surface Transportation Act (FAST Act), current federal transportation planning requirements, and the Florida Transportation Plan. The six goals of Connect 2045 are:



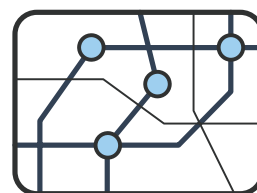
Multimodal

Develop and maintain a balanced and efficient multimodal transportation system



Economic Development

Support the economic development and growth of the TPO area and region



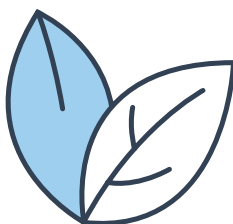
Connectivity

Enhance and expand transportation connectivity and choice for all users



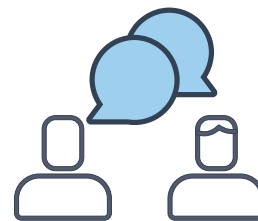
Safety

Eliminate or reduce crash related fatalities and serious injuries (safety) and improve security throughout the transportation network



Livability

Promote livability by providing, protecting and enhancing social, cultural, physical and natural environmental places



Involvement

Promote equity, transparency, and opportunities for the public to be involved with their transportation system

PUBLIC PARTICIPATION

The importance of public outreach as a means to inform, educate, and involve citizens in the transportation decision-making processes that impact their daily lives cannot be underestimated. The public involvement approach encompassed a range of strategies to involve the public in the development of Connect 2045. In addition, the participation of community stakeholders, agency representatives, planners, engineers, and other knowledgeable public and private sector professionals provided valuable input to identify issues and generate appropriate solutions. The goal was a consensus-based plan that accurately reflects the area's needs.

Public outreach efforts include a need to both inform and solicit input from various members of the public. Since these efforts target people with various levels of education, interest, background, goals and desires, socioeconomic status and available time, multiple public involvement tools made up the approach for Connect 2045. The primary tools are described below and on the following page.

It is important to note that the inability to conduct and participate in face-to-face meetings during the COVID-19 declared state of emergency required the use of virtual/technology-based alternatives to some of the public outreach activities.

Focus Group Workshops

Focus Group Workshops were utilized as innovative and interactive planning activities to engage attendees in discussion on trending transportation topics and to seek input regarding the roles that technology, resiliency, and funding challenges play in the transportation future. Input received helped identify consistent themes and prevailing issues to be addressed in Connect 2045. A total of five workshops were conducted and held in geographically dispersed areas throughout the TPO planning area in January of 2020.

Civic Presentations

Representatives from the River to Sea TPO attended three in-person and six virtual meetings for civic organizations in Volusia and Flagler County to deliver presentations on Connect 2045 and to encourage participation in the process. Overall, nearly three hundred and fifty persons were part of this outreach. These meetings occurred in February, March, and April 2020.

Needs Assessment Workshops

Three public workshops were held in geographically dispersed areas throughout the TPO planning area. The purpose of these workshops was to present the analysis method, review the needs assessment by mode and area, and solicits comments on projects identified as needs as well as unidentified needs. Input received from the Needs Assessment informed the development of the draft Cost Feasible Plan.

Cost Feasible Plan Development Workshops

Two virtual public webinars for the Cost Feasible Plan were held in May 2020. The purpose of these webinars was to present the draft Cost Feasible Plan and solicit input and comments from the public and community stakeholders. Input received from these webinars was used to refine the draft Cost Feasible project list.

Environmental Justice Workshop

As part of the process for developing the plan, it was critical to understand and address the potential effects of planning and prioritization decisions on traditionally underserved and underrepresented populations. An environmental justice approach to transportation planning and project development recognizes the fair treatment of all groups within the community. An Environmental Justice virtual webinar was hosted to gather input on the draft plan and its potential impacts to underserved and underrepresented populations.

LRTP Survey

A Connect 2045 survey was conducted to gather insight into the public's thoughts on issues impacting transportation, including resiliency, technology, and funding challenges. The survey was available online and as a hard copy, in both English and Spanish versions. The results were used to inform the LRTP work effort. There were 534 survey responses.

LRTP Website

Information on scheduled and upcoming activities was provided to the public through the Connect 2045 website (www.r2ctpoconnect2045.com), which included the dates, times and locations of the LRTP Subcommittee meetings, workshops, and webinars. Additionally, project specific documents were posted to this website throughout the development of the plan for public access.

Videos

Another innovative method utilized to engage the public was the development of three videos that were released during specific phases of the planning process. These three videos were posted to the Connect 2045 website, the [TPO's website](#) and the [TPO's YouTube channel](#).

Social Media

Information on scheduled and planned activities was also posted to the TPO's Facebook site and Twitter accounts.

Environmental Mitigation Consultation

In order to understand the environmental mitigation opportunities and issues within the metropolitan planning area, the TPO conducted direct outreach to appropriate federal, state and local land management, resource, environmental, and historic preservation agencies.

Freight Coordination

As part of the planning process and to identify the potential freight transportation needs, the TPO engaged the freight community including extended coordination with FDOT as a key agency planning for regional and statewide freight transportation. Additional outreach also included economic development and chamber organizations that represent private freight industry interests.

CONNECT 2045 SCENARIOS

As transportation planning organizations develop long-range plans, it is important to consider the potential effects of possible future conditions. Scenario analysis can be a useful tool to better understand the potential influence of alternative futures, aiding the development of policies and prioritization of projects. The use of scenarios for the development of LRTPs is encouraged but not required. Consistent with Connect 2045's overarching themes, the TPO conducted the following scenarios:

Technology Scenario

Technology is transforming transportation in new ways and the pace of change is accelerating, so it is more important than ever to understand how emerging technologies will shape transportation in the future. This includes not just the technology itself, but changes in policy decisions and infrastructure improvements. The intent of the technology scenario was to identify and prioritize potential corridors for future technology infrastructure improvements divided into near-term, mid-term, and long-term needs.



Resiliency Scenario

Resiliency reflects the ability to anticipate, prepare for, and adjust to changing conditions, and recover rapidly after disruptive events such as flooding, hurricane damage, or major traffic incidents. It is important for the transportation system to be resilient in the face of these disruptions to ensure reliable movement of people and goods. The intent of the resiliency scenario was to compare the inundation areas(s) of sea level rise to the River to Sea TPO planning area and identify potentially vulnerable transportation facilities that were listed in the Needs Assessment phase of the project.



Funding Scenario

At the heart of developing Connect 2045 is the prioritization and selection of projects for funding within the constraints of forecasted revenues. FDOT develops the forecast of funds on the state highway system that are expected to be available over the 25-year planning period. The forecast uses factors known at the time it is developed. As with any long-range financial projection, actual revenue may vary due to unanticipated changes in economic conditions, revenue sources, and other factors. The intent of the funding scenario was to illustrate how alternative funding futures would potentially change the projects and priorities included in the plan. The scenarios consist of both a LOW and HIGH funding amount relative to the baseline revenue forecast used for development of the Connect 2045.



FINANCIAL RESOURCES

Long range transportation plans rely upon revenue forecasts that project anticipated financial resources that will be available to preserve and improve the transportation system. A revenue forecast is used to determine which identified and prioritized transportation needs can reasonably be expected to be funded over the timeframe of the LRTP. These projects will make up the Cost Feasible Plan.

FDOT develops the State Revenue Forecast every five years in coordination with the MPO Advisory Council (MPOAC) to support development of LRTPs. The Revenue Forecast assists MPOs in complying with the federal requirements to develop cost feasible transportation plans and demonstrates coordinated planning for transportation facilities and services. The State Revenue Forecast is also used by FDOT for the Strategic Intermodal System (SIS) Cost Feasible Plan. The forecast is based on current federal and state laws, funding sources, and FDOT policies, as well as assumptions concerning factors affecting state revenue sources (e.g., population growth rates, motor fuel consumption, and tax rates).

The State Revenue Forecast is focused on state and federal funds that “pass through” the FDOT Five-Year Work Program. Local estimates were prepared separately based upon anticipated revenues for Volusia and Flagler counties.

Revenue Summary

Financial resources are necessary to maintain, develop, and build transportation services or facilities to serve the community. As part of Connect 2045, a revenue forecast and projection was performed to identify the potential revenues available to fund prioritized projects in the Cost Feasible Plan. The Connect 2045 revenue forecast is based on current and assumed future federal, state, and local funding sources, and consideration of projected population and employment growth rates, fuel consumption, transit ridership, Florida Revenue Estimating Conference tax rates, and local tax rates.

The available revenues for the long range transportation plan can be categorized into four major categories:

- 1. **SIS Funding** - FDOT funding that is earmarked exclusively for SIS projects
- 2. **Other Federal and State Funding** - includes Other Arterials (OA) funds, Transportation Alternative funds (TALU/TALL/TALT), and Transportation Management Area (TMA) funds
- 3. **Local Revenues** - includes county and city impact fees, gas taxes, and other taxes where applicable
- 4. **Transit Revenues** - projections include federal, state, and local sources

Table 1 provides a summary of projected revenue totals by source.

Table 1: Connect 2045 Revenue Forecast Summary - Year of Expenditure (YOE)

Category	Total Projected Revenues 2026-2045
Projected State and Federal Revenues	
Other Roads Construction & ROW	\$872,750,000
TMA (for MPO Population > 200,000)	\$112,910,000
TALU (Transportation Alternatives for TMAs)	\$9,120,000
Strategic Intermodal System Projects	
SIS Revenues	\$1,385,520,017
Projected Local Revenues	
Volusia County Revenues (Capital Improvements)	\$655,078,000
Volusia County Revenues (Operations & Maintenance)	\$448,161,000
Volusia County Revenues (Distributed to Municipalities)	\$265,968,000
Flagler County Revenues	\$357,555,000
Projected Transit Revenues¹	
Volusia County Transit Revenues	\$827,901,000
Flagler County Transit Revenues	\$86,245,000
TOTAL	\$5,021,208,017

¹Transit revenue projections include federal, state, and local sources.



TRANSPORTATION PLAN

Requirements for a long-range plan include identifying the major capacity enhancing projects, transportation programs or categories of projects and projects of regional significance within the planning area. **Table 2** includes the SIS Cost Feasible projects. **Table 3** includes Other Arterial Cost Feasible Projects. The map in **Figure 1** illustrates the SIS Cost Feasible projects shown in **Table 2**, while **Figure 2** illustrates Other Arterial Cost Feasible projects shown in **Table 3**. The Map ID listed for each project in Table 2 and Table 3 are used to label the corresponding projects in Figures 1 and 2.

Although capacity enhancing projects are important, a comprehensive solution to our future needs requires a variety of actions. The TPO accomplishes this by utilizing set-aside funds for specific transportation programs and categories of projects. Transportation Management Area (TMA) funds are allocated on a 40/30/30 split to Intelligent Transportation System (ITS)/Traffic Operations and Safety improvements, Bicycle and Pedestrian projects, and Transit.

Bicycle and Pedestrian Program

The River to Sea TPO has a long-standing commitment to bicycle and pedestrian planning and project implementation and works closely with local, regional, and state stakeholders. Over the last several years, the River to Sea TPO has completed numerous bicycle and pedestrian feasibility studies and plans focused on school safety, as well as regional and local comprehensive and multimodal transportation plans.

Additionally, the TPO is fortunate to have the Tier 1 & 2 SunTrail networks within our planning area. The continued allocation of TMA set-aside funding for Bicycle/Pedestrian projects (roughly \$34 million through the year 2045) and the use of Transportation Alternatives (TA) funding reaffirms the River to Sea TPO's commitment to the development of bicycle and pedestrian facilities and regional trail facilities that provide vital connections within the state and national trail and greenway network.

ITS, Traffic Operations, and Safety Program

Connect 2045 also reflects the River to Sea TPO's commitment to preserving and enhancing the existing transportation infrastructure by allocating funds to improve traffic operations and safety and to utilize new technology to improve the efficiency of our existing system. This plan allocates roughly \$45 million in TMA set-aside funding through the year 2045 for projects that improve safety and efficiency.



Transit

The River to Sea TPO transportation plan also continues to provide support for local public transit service by reserving a portion of the TMA set-aside to provide funding of roughly \$34 million through the year 2045. We recognize that this funding supports the continuation of existing service and the TPO will continue to seek additional transportation funding strategies that will support the expanded transit needs of this planning area.

Local Initiatives

Connect 2045 also helps to create high quality transportation facilities by allocating approximately \$40 million (in present day dollars) in funding for Local Initiative projects on the state highway system. These include projects that address complete streets retrofits, roundabouts, technology projects, climate change adaptation and other improvements that support the goals of the plan.

Tourism and Travel

Owing to the TPO planning area's status as a leading tourism destination, long range planning must not only consider a burgeoning resident population, but also constantly growing visitation to the area's events, nature-based destinations, and many Florida Scenic Highways. Tourism and travel industry representatives were among those providing feedback to this plan through input mechanisms such as the Focus Group Workshops. Tourism and travel were also integrated into the planning and project prioritization process through scoring criteria that gave points to projects providing access to tourism activity centers.

Freight

The River to Sea TPO is committed to the efficient movement of goods and supporting the needs of the freight community throughout the planning area and the region. Stakeholder input emphasized that it is critical for the area's transportation network to support Trader Joe's, Amazon, US Foods, Boston Whaler and other commercial and manufacturing operations that demonstrate the increased demand for freight activity. The TPO looks forward to continued involvement in planning to meet these needs. Continuing partnerships with economic development organizations like Team Volusia are important to ensure that long range transportation planning supports the future location of manufacturing and distribution to this area.



Table 2: Connect 2045 SIS Cost Feasible Projects

Map ID	Facility	Improvement	Cost (Year of Expenditure)
A	I-4/SR 400 from Seminole County Line to East of SR 472	Managed Lanes	\$937.99 M
	SR 472 from Graves Avenue to Kentucky/MLK Boulevard	Widen to 6 lanes	
	Saxon Boulevard from I-4 to Normandy Boulevard	Widen and Ramp Improvements	
	Rhode Island Avenue Extension from Veterans Memorial Parkway to Normandy Boulevard	New Road and ML Ramps	
B	SR 15 (US 17) from DeLeon Springs to SR 40	Widen to 4 lanes	\$65.86 M ¹
C	SR 40 from Breakaway Trails to Williamson Boulevard	Widen to 6 lanes	\$49.39 M
D	SR 40 from West of SR 11 to West of Cone Road	Widen to 4 lanes	\$79.92 M
E	SR 40 from SR 15 (US-17) to SR 11	Widen to 4 lanes	\$68.94 M
F	I-95/LPGA Boulevard Interchange from Williamson Boulevard to Tomoka Farms Road	Interchange Improvement	\$32.48 M
G	I-95 Interchange at Pioneer Trail	New Interchange	\$18.50 M
H	I-95/US-1 Interchange	Interchange Improvement	\$54.35 M
I	SR 100 from Old Kings Road to Belle Terre Parkway	Widen to 6 lanes	\$59.95 M
J	I-95/SR 44 Interchange	Interchange Improvement	\$2.25 M
K	I-95 Interchange at Maytown Road (Farmton Interchange)	New Interchange	Developer Funded
L	Tomoka River Bridge (LPGA Boulevard) from West of Champions Drive to East of Tomoka Farms Road	Bridge to match interchange configuration	Partially Funded ²

¹ It is anticipated that this SR 15 (US-17) widening will be a SIS-funded project. \$10,000,000 is identified in Table 3 for funding to show local commitment and priority.

² It is anticipated that the Tomoka River Bridge will be a SIS-funded project. \$3,570,000 (YOE) is identified in Table 3 for funding to show local commitment and priority.

Table 3: Connect 2045 Other Arterial Cost Feasible Projects

Map ID	Facility	Improvement	Cost (Year of Expenditure)
P	US-1 at Park Avenue	Intersection Improvement	\$7.95 M
Q	SR 483 (Clyde Morris Blvd.) from SR 400 (Beville Road) to US-92	Corridor Improvement	\$84.35 M
R	Old Kings Road from Palm Harbor Village Way to Farnum Lane	Widen to 4 lanes	\$28.91 M
S	Old Kings Road from Farnum Lane to Forest Grove Drive	Widen to 4 lanes	\$35.77 M
T	SR 44 from Grand Ave to SR 15A	Widen to 4 lanes	\$27.05 M
U	US-92 from I-4 Eastbound Ramp to CR 415 (Tomoka Farms Road)	Widen to 6 lanes	\$67.00 M
L	Tomoka River Bridge (LPGA) W of Champions Drive to E of Tomoka Farms Road	Bridge to match interchange configuration	\$3.57 M ¹
V	US 17/92 from SR 472 to SR 15A (Taylor Road)	ITS	\$46.50 M
W	SR 44 from I-4 to Prevatt Avenue	Widen to 6 lanes	\$10.82 M
X	US-1 from Nova Road (N) to I-95	Widen to 6 lanes	\$65.62 M
Y	SR 415 (Tomoka Farms Road) from Acorn Lake Road to Lake Ashby Road	Widen to 4 lanes	\$98.14 M
Z	SR 415 (Tomoka Farms Road) from Lake Ashby Road to SR 44	Widen to 4 lanes	\$130.15 M
AA	SR 44 from SR 415 to Glencoe Road	Widen to 6 lanes	\$117.31 M
BB	SR 44 from Lake County line to Grand Avenue	Widen to 4 lanes	\$55.69 M
CC	Old Kings Road Extension (Phase II) from Mantanzas Woods Parkway to Old Kings Road	New 4-lane road	\$15.13 M
DD	Commerce Parkway Connector from SR 5 (US-1) to SR 100	New 2-lane road	\$12.80 M
B	SR 15 (US 17) from DeLeon Springs to SR 40	Widen to 4 lanes	\$10.00 M ²
-	Local Initiatives	Varies	\$72.08 M
-	SHS Operational Improvements	Varies	\$3.34 M

¹ It is anticipated that the Tomoka River Bridge will be a SIS-funded project. \$3,570,000 (YOE) is identified for funding to show local commitment and priority. This project is also included in the SIS Cost Feasible Projects table (Table 2).

² SR 15 (US 17) is also included in the SIS Cost Feasible Projects table (Table 2). \$10,000,000 is identified for funding to show local commitment and priority for this project.

Figure 1: Strategic Intermodal System (SIS) Projects

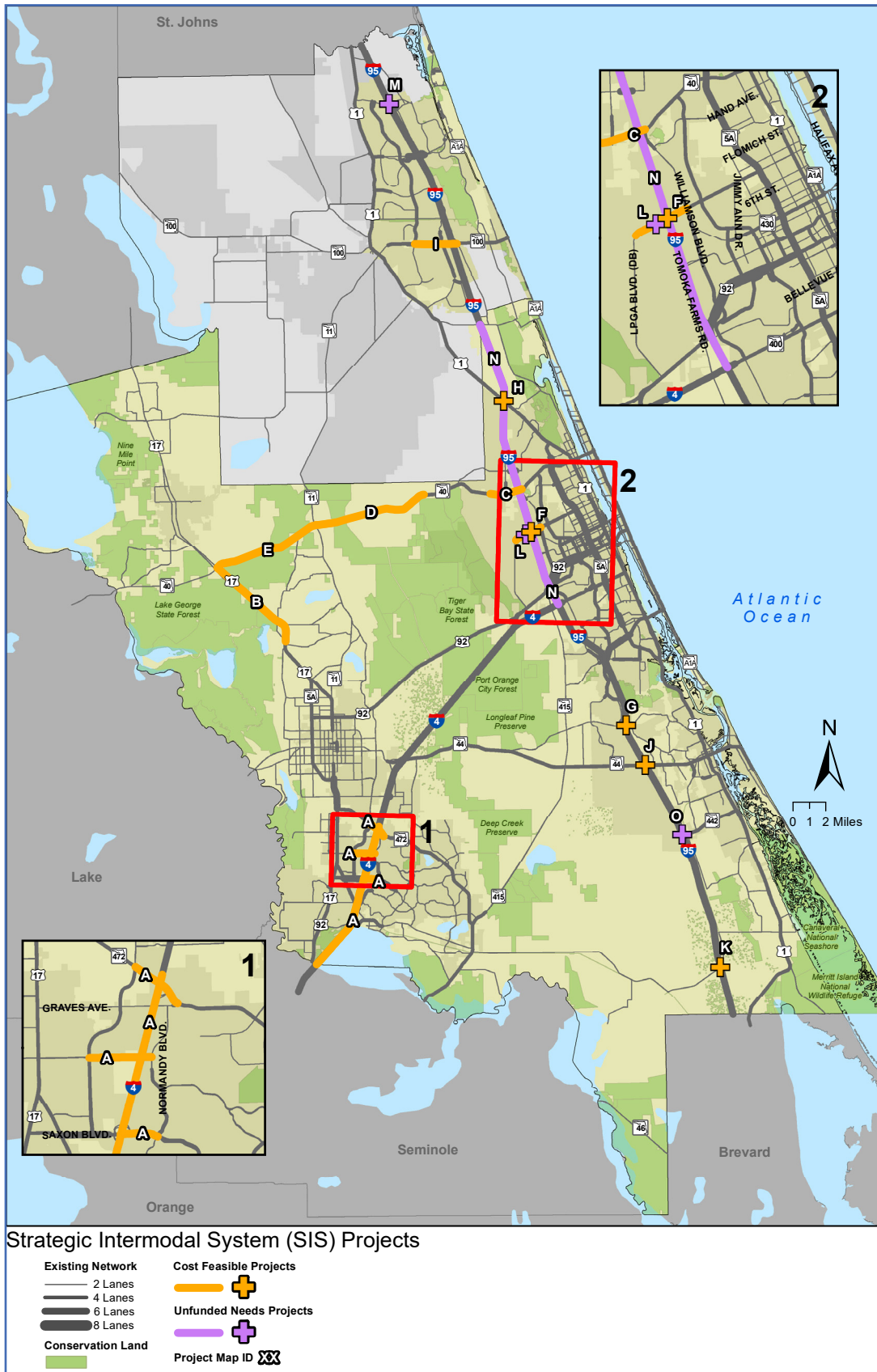
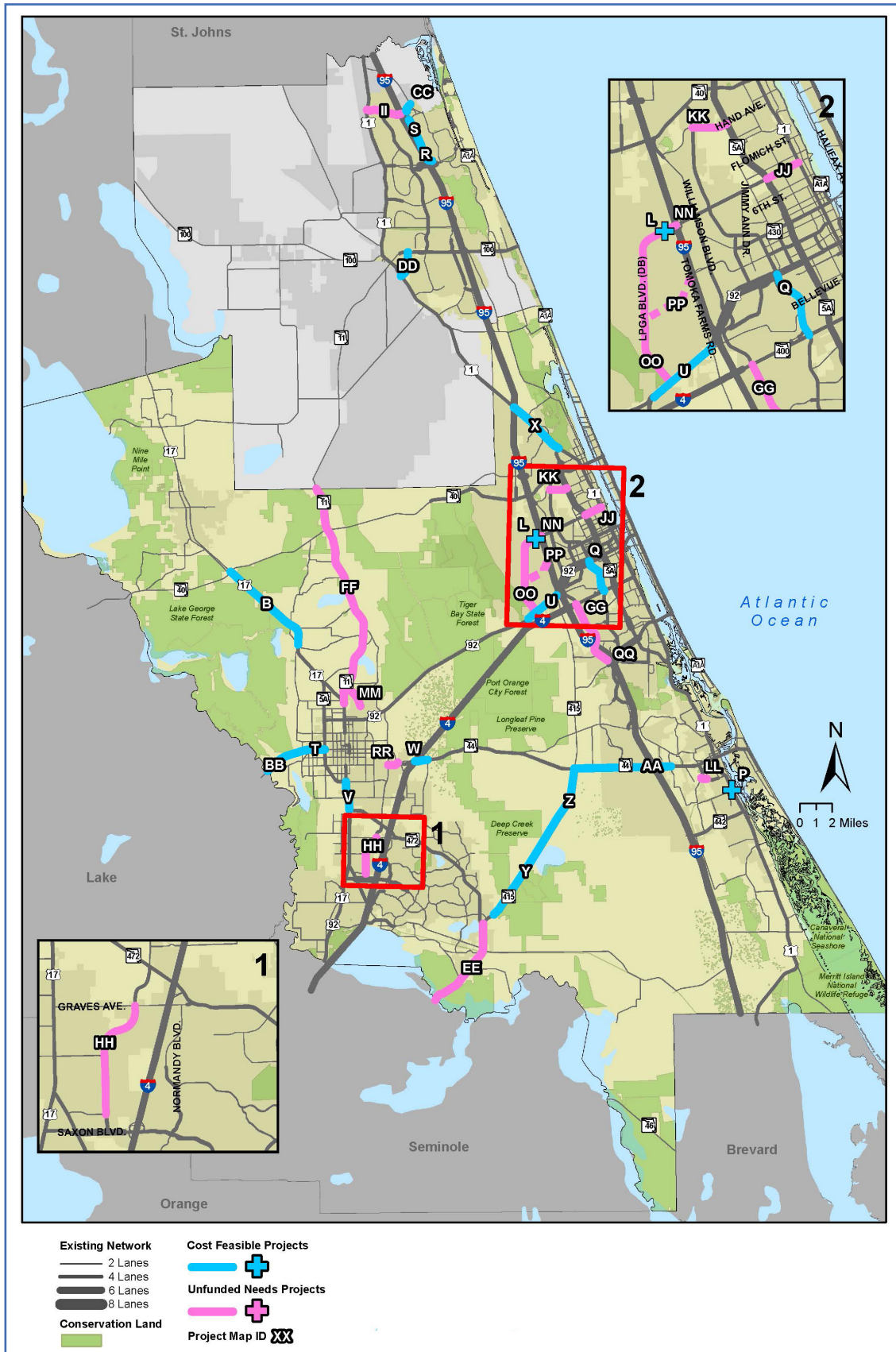


Figure 2: Other Arterials Projects



LOCAL MUNICIPAL PROJECTS

Local roadway projects were submitted by Volusia County and the City of Palm Coast for inclusion in Connect 2045 for informational purposes. While these local projects are not part of the cost feasible plan, they provide the local piece to the transportation network needs of the area. These local projects are funded through local resources and are managed by the local governments. The local projects provided by Volusia County and Palm Coast are listed in **Table 4**, **Table 5**, and **Table 6**.

Table 4: Volusia County – Local Projects for Connect 2045

Projects	Limits (To - From)	Cost (\$millions)*	Timing	General Location
Zone 1 - NE Volusia				
LPGA Blvd - widening to 4 lanes	Tymber Creek Rd to I-95 Interchange	\$21.70	2026 to 2030	Daytona Beach
Tymber Creek Road - New 2 lane road	South of SR 40 to LPGA Blvd	\$17.10	2026 to 2030	Daytona Beach/ Ormond Beach
Beach St - Raise Road	Pine Tree Dr to Tomoka River bridge	\$4.00	2031 to 2035	Ormond Beach
Hand Ave - widening to 4 lanes	Williamson Blvd to SR 5A/ Nova Rd	\$24.00	2031 to 2035	Ormond Beach
Williamson Blvd - widening to 4 lanes	Madeline Ave to SR400/Beville Rd	\$6.70	2031 to 2035	Daytona Beach/ Port Orange
Dunn Ave - widening to 4 lanes	Williamson Blvd. to Bill France Blvd.	\$9.40	2036 to 2040	Daytona Beach
Dunn Ave - widening to 4 lanes	Bill France Blvd. to Clyde Morris Blvd.	\$7.10	2036 to 2040	Daytona Beach
Tymber Creek - widening to 4 lanes	Peruvian to Airport	\$8.80	2036 to 2040	Ormond Beach
LPGA Blvd - widening to 4 lanes	US 92 to Tymber Creek Rd	\$16.10	2041 to 2045	Daytona Beach
Taylor Branch Rd - widening to 4 lanes	SR 421/Dunlawton Av to Clyde Morris Blvd	\$8.30	2041 to 2045	Port Orange
Tomoka Farms Rd - widening to 4 lanes	I-4 Overpass to US 92/ISB	\$6.40	2041 to 2045	Daytona Beach
Zone 2 - SE Volusia				
Pioneer Tr/Tomoka Farms Rd - Roundabout	Intersection Improvement	\$3.50	2026 to 2030	Samsula
Pioneer Tr/Wallace Rd - Safety & Paved Shoulders	I-95 to SR 44 (East)	\$13.50	2026 to 2030	New Smyrna Beach
Joesphine St./10th St - widening to 4 lanes	Old Mission to Tatum St	\$5.00	2031 to 2035	New Smyrna Beach
Pioneer Tr - Safety & Paved Shoulders	SR 44 (West) to Airport Rd	\$5.50	2031 to 2035	Samsula
Sugar Mill Rd - widening to 4 lanes	SR 44 to Pioneer Tr	\$9.80	2041 to 2045	New Smyrna Beach

Table 4: Volusia County – Local Projects for Connect 2045 (Continued)

Projects	Limits (To - From)	Cost (\$millions)*	Timing	General Location
Zone 3 - SW Volusia				
W Volusia Beltway (VMP Extension) - New 4 lane	SR 472 to Graves	\$15.00	2026 to 2030	Orange City
W Volusia Beltway (VMP) - widening to 4 lanes	Rhode Island Ave to Harley Strickland	\$7.40	2026 to 2030	Orange City
W Volusia Beltway (VMP) - widening to 4 lanes	Graves to Rhode Island Ave	\$9.90	2031 to 2035	Orange City
Dirksen - adding bi-directional turn lane	US 17/92 to I-4	\$7.90	2031 to 2035	DeBary
Doyle Road - widening to 4 lanes	Providence Blvd. to Saxon Blvd	\$16.80	2036 to 2040	Deltona
Doyle Road - widening to 4 lanes	Saxon Blvd. to Courtland Blvd.	\$15.50	2041 to 2045	Deltona
Zone 4 - NW Volusia				
Beresford Ave - extend road	Blue Lake Ave to SR 44	\$15.80	2026 to 2030	DeLand
W Volusia Beltway (Kepler Rd) - widening to 4 lanes	US 92 to SR 44	\$16.50	2031 to 2035	DeLand
W Volusia Beltway (Kepler Rd) - widening to 4 lanes	SR 44 to Beresford Ave Extension	\$4.60	2031 to 2035	DeLand
W Volusia Beltway (Dr MLK Jr) - widening to 4 lanes	Beresford Ave Extension to Taylor Rd	\$6.20	2036 to 2040	DeLand
W Volusia Beltway (Dr MLK Jr) - widening to 4 lanes	Taylor Rd to Orange Camp Rd	\$6.20	2036 to 2040	DeLand
W Volusia Beltway (Dr MLK Jr) - widening to 4 lanes	Orange Camp Rd to SR 472	\$10.50	2041 to 2045	DeLand

Table 5: Volusia County – Unfunded Local Projects for Connect 2045

Projects	Limits (To - From)	Cost (\$millions)*	General Location
Zone 1 - NE Volusia (Unfunded Projects)			
Airport Road (PO) - widening to 4 lanes	Sabal Creek to Creekside Middle	\$6.7	Port Orange
Airport Road (PO) - widening to 4 lanes	Creekside Middle to Pioneer Trail	\$7.6	Port Orange
Airport Road (OB) - widening to 4 lanes	Tymber Creek Rd. to Pineland Tr.	\$8.1	Ormond Beach
Airport Road (OB) - widening to 4 lanes	Pineland Tr. to Sunshine Blvd.	\$8.7	Ormond Beach
Airport Road (OB) - widening to 4 lanes	Sunshine Blvd. to US 1	\$10.5	Ormond Beach
Dunn Ave. - New 2 lane road	LPGA Blvd. to Tomoka Farms Rd.	\$37.8	Daytona Beach
Knox Bridge Replacement	Bridge	\$25.0	Ormond by the Sea
Main St. Bridge Replacement	Bridge	\$50.0	Daytona Beach

Table 5: Volusia County – Unfunded Local Projects for Connect 2045

Projects	Limits (To - From)	Cost (\$millions)*	General Location
Old Kings Hwy - widening to 4 lanes	Old Dixie Hwy to Flagler Co. Line	\$7.6	Ormond Beach
Talyor Road (CO) - widening to 4 lanes	Tomoka Farms Rd. to Summer Tree Rd.	\$20.4	Port Orange
Tomoka Farms Fd. - widening to 4 lanes	Taylor Rd. to I-4 Overpass	\$22.8	Port Orange
Williamson Blvd. -widening to 4 lanes, incl I-95 Overpass	Summer Tree Rd. to Madeline Ave.	\$27.0	Port Orange
Zone 2 - SE Volusia (Unfunded Projects)			
Pioneer Trail - widening to 4 lanes	Airport Road to I-95	\$13.8	New Smyrna Beach
Pioneer Trail - widening to 4 lanes	SR 44 (West) to Airport Rd	\$47.2	Samsula
Williamson Blvd. - New 4 lane	SR 44 to Pioneer Tr	\$33.0	New Smyrna Beach
Zone 3 - SW Volusia (Unfunded Projects)			
Doyle Road - widening to 4 lanes	Courtland Blvd. to SR 415	\$9.6	Deltona
Providence Blvd - widening to 4 lanes	Doyle Road to East Normandy	\$14.1	Deltona
Providence Blvd - widening to 4 lanes	East Normandy to Saxon	\$7.3	Deltona
Providence Blvd - widening to 4 lanes	Saxon to Tivoli	\$8.8	Deltona
Providence Blvd - widening to 4 lanes	Ft. Smith Blvd. to Howland Blvd.	\$14.5	Deltona
Rhode Island Ext with I-4 overpass - extend as 2 lane road	Veterans Memorial Pkwy to Normandy Blvd.	\$15.5	Deltona/ Orange City
Rhode Island Ext - I-4 Interchange	I-4 Interchange	\$73.0	Deltona/ Orange City
Saxon Blvd - widening to 4 lanes	Tivoli to Providence	\$8.3	Deltona
Saxon Blvd Extension - extend road	US 17/92 to Westside Parkway	\$9.9	Debary/ Orange City
Westside Pkwy - extend road	French Ave. to Rhode Island Ave.	\$8.5	Orange City
Westside Pkwy - extend road	Rhode Island Ave. to Saxon Blvd. Extension	\$11.8	Orange City
Westside Pkwy - extend road	McGregor Rd. to Minnesota/Hamilton	\$6.2	Orange City/ Deland
Zone 4 - NW Volusia (Unfunded Projects)			
Blue Lake Avenue Extn - New 2 LN	Blue Lake Ave (in Victoria Park) to Orange Camp Rd	\$8.0	DeLand
CR 305 (Bunnell Rd) - widening to 4 lanes	US-17 to Flagler Co. Line	\$38.4	Seville
Orange Camp Rd - widening to 4 lanes	US 17/92/Woodland Blvd to W Volusia Bltwy/MLK	\$19.1	DeLand
Plymouth Ave - adding bi-directional turn lane	SR 15A to US 17/92	\$9.2	DeLand

Table 6: City of Palm Coast Unfunded Local Projects for Connect 2045

Projects	Limits (To - From)	Cost (\$millions)*	Date of Estimate
Belle Terre Parkway - widening to 6-lanes	Pine Lakes Pkwy to Palm Coast Parkway (EB)	\$2.60	2018
Bulldog Drive - widening to 4-lanes	SR100 to Central Ave.	\$3.60	2018
Matanzas Woods Pkwy. - widening to 4-lanes	US1 to Southbound I-95 ramps	\$14.10	2014
Matanzas Woods Pkwy. - widening to 4-lanes	I-95 to Old Kings Rd. Extension	\$2.46	2014
Old Kings Rd. South - widening to 4-lanes	SR100 to Old Dixie Hwy.	TBD	
Old Kings Rd. - widening to 4-lanes	Town Center Blvd. to Palm Coast Pkwy.	\$7.80	2018
Royal Palms Parkway - widening to 4-lanes	US1 to Town Center Blvd.	\$29.30	2018
Town Center Blvd - widening to 4-lanes	Central Ave. to Royal Palms Pkwy.	\$6.10	2018
Belle Terre Pkwy. Corridor Turn-lane Project	Eastwood Dr. to Burroughs Dr.	\$1.89	2018
Belle Terre Blvd. Corridor Turn-Lane Project	Karas Trail to Zonal Geranium Trail	\$0.39	2018
Colbert Lane @ Blare Dr. Turn-Lane Project	Colbert Lane @ Blare Dr.	\$0.10	2018
Palm Harbor Pkwy. Corridor Turn-Lane Project	Crystal Way to Fernmill Lane	\$1.76	2018
Pine Lakes Pkwy. S. Corridor Turn-Lane Project	Wellington Dr. to Commerce Blvd.	\$1.27	2018
Ravenwood @ Rolling Sands Dr. Turn Lane	Ravenwood Dr. @ Rolling Sands Dr.	\$0.10	2018
Rymfire Dr. Corridor Turn-Lane Project	Ryan Dr. E to Rymfire Elementary	\$1.46	2018
Seminole Woods Blvd. Corridor Turn-Lane Project	Sloganeer Tr. W. to Pinnacles Plaza	\$1.56	2018
Whiteview Pkwy. Corridor Turn-Lane Project	Rolling Sands Dr. to Princess Rose Dr.	\$2.08	2018
Palm Coast Pkwy. And Pine Lakes Pkwy. SB Right Turn Lane	Palm Coast Pkwy. and Pine Lakes Pkwy.	\$0.10	2018
Palm Coast Pkwy. (EB) @ Pine Cone Dr. Turn Lane and Signal Improvement	Palm Coast Pkwy. and Pine Cone Dr.	\$0.53	2018
Palm Coast Pkwy. (EB) Turn-lane Projects	Corporate Dr. to Belle Terre Pkwy.	\$0.20	2018
Palm Coast Pkwy. (WB) Turn Lane Projects	Bridgehaven Dr. to Corporate Dr.	\$0.39	2018
Palm Coast Pkwy. (WB) Turn Lane Projects & Signal Improvement	Pine Cone Dr. to Frontage Rd.	\$0.72	2018
Palm Coast Pkwy. (WB) @ Colbert Lane Turn-lane Projects	Palm Coast Pkwy. and Colbert Lane	\$0.10	2018

* No Right-of-Way Costs Included

PLAN IMPLEMENTATION

Connect 2045 was developed to set the long-range transportation vision and plan for Volusia and eastern Flagler counties, and will guide the TPO for the next five years. Successful implementation of Connect 2045 will rely upon the support and cooperation of local municipalities, Volusia County, Flagler County, FDOT District Five, transit service providers, neighboring counties and TPO/MPOs, and the community.

The TPO will work closely with transportation planning partners to secure funding and program projects that will meet the needs of this area.

The Connect 2045 LRTP is an integral component of the TPO's overall planning and programming framework. Connect 2045's Cost Feasible Plan (CFP) provides the pipeline of projects that will support annual development of the [List of Priority Projects](#) (LOPP). The LOPP subsequently determines which projects will advance into the [Transportation Improvement Program](#) (TIP) and [FDOT Five-Year Work Program](#).

In addition to the implementation of specific CFP projects and other planning and policy steps, Connect 2045 includes the following recommended **Implementation Actions**:

- Utilize the \$40 million set-aside from the CFP for prioritized Local Initiatives projects which could include technology projects identified in the ACES Corridor Prioritization.
- Establish an ACES committee or working group to provide guidance regarding the approach to future technology investments and potential pilot projects.
- Utilize information from the Resiliency Scenario analysis and prior studies to develop a strategy for future incorporation of resiliency data into long range planning that advances the Board's policy direction.
- Undertake planning studies for corridors that were acknowledged during the development of Connect 2045 as having operational and/or safety challenges and needs. Potential study corridors include Mason Avenue (SR 430), SR A1A, I-4 (Regional Transportation System Management and Operations (TSM&O)), and SR 100 in Palm Coast.
- In anticipation of shifting revenue availability and increasing funding shortfalls, re-evaluate major capacity projects that will face significant fiscal limitations to completion.
- Seek additional public input as defined in the Connect 2045 Public Involvement Plan in response to COVID-19.
- Explore studying the impact of COVID-19 on travel behavior and the demand for transportation within the TPO planning area to understand implications for the next LRTP.

